

# Future Research for Improving Risk Assessment Methods

Of Mice, Men, and Models

August 16-18, 2000

Snowmass Village Aspen, Colorado

National Institute for Occupational Safety and Health National Institute of Environmental Health Sciences U.S. Environmental Protection Agency Chemical Manufacturers Association United Auto Workers





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# Future Research for Improving Risk Assessment Methods

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#### **Workshop Overview**

Risk assessment has become an essential tool for developing occupational and environmental health and safety standards and other policies to protect workers and the public from hazardous exposures. Risk Assessment is a relatively new discipline and the currently available data and methods are often inadequate and/or controversial. The lack of consensus on what are appropriate methods for risk assessment has frequently led to acrimonious debates, which have been an impediment to the development of appropriate and expedient responses to environmental and occupational hazards. The source of the controversies are generally related to either the methods used for developing the toxicologic (e.g., mice) or epidemiologic (e.g., men) databases or to the methods used to develop mathematical predictions (e.g., models) from these databases. Thus research is needed to develop methods that will enhance the relevance of toxicologic and epidemiologic data, and the credibility of models of the results from these studies for predicting the consequences from exposures to occupational and environmental hazards. The resulting improvements in the methodology used for risk assessments should lead to the greater acceptance of the results from risk assessments, and ultimately to improvements in the development of standards and policies designed to protect workers and the public from exposure to hazardous substances.

#### **Workshop Goals**

- Develop a national agenda for research targeted towards improving risk assessment methods.
- > Foster the development of an interdisciplinary approach to research on risk assessment methods.
- ldentify problems with current methods used in epidemiologic and toxicologic studies that limit their usefulness for risk assessment.
- Identify problems with current methods used in models for predicting doses and risks associated with exposure to occupational and environmental hazards.
- ldentify research that may resolve some of the problems associated with current methods used in toxicology, epidemiology and modeling.
- ldentify mechanisms and funding resources for the support of targeted research to resolve methodological problems with risk assessment.
- > Develop partnerships and mechanisms for increasing stakeholder and community input.

#### **Who Should Attend?**

Risk assessors, researchers, policy makers, grants program administrators, labor, industry organizations, public advocacy and community groups.

# PRELIMINARY WORKSHOP PROGRAM

## TUESDAY, AUGUST 15™

4:00 p.m.–7:00 p.m. Early Bird Registration

#### WEDNESDAY, AUGUST 16TH

7:00 a.m.	Registration and Continental Breakfast					
8:00 a.m.	<b>WELCOME</b> Paul Schulte, National Institute for Occupational Safety and Health					
8:20 a.m.	WORKSHOP CHARGE: Current Problems and Opportunities in Risk Assessment Methods Research Leslie Stayner, National Institute for Occupational Safety and Health					
8:40 a.m10:00 a.m.	PLENARY SESSION I: Current Perspectives on Issues in Risk Assessment Methods Chair: A. John Bailer, Miami University and National Institute for Occupational Safety and Health Adam Finkel, Occupational Safety and Health Administration Bernard Goldstein, Robert Wood Johnson School of Medicine Roger McClellan, Chemical Industry Institute for Toxicology Frank Mirer, United Auto Workers Ellen Silbergeld, Environmental Defense Fund Herman Gibb, U.S. Environmental Protection Agency					
10:00 a.m.	Open Discussion					
I0:20 a.m. Break						
10:40 a.m12 noon	PLENARY SESSION II: Epidemiologic Issues Chair: Kyle Steenland, National Institute for Occupational Safety and Health					
10:40 a.m.	Environmental Epidemiology and Risk Assessment Joel Schwartz, Harvard School of Public Health					
II:00 a.m.	Issues in Exposure and Dose Assessment for Epidemiology and Risk Assessment Tom Smith, Harvard School of Public Health					

# PRELIMINARY WORKSHOP PROGRAM (continued)

II:20 a.m.	Biologic Markers and Epidemiologic Risk Assessment Paul Brandt-Rauf, Columbia University			
II:40 a.m.	Open Discussion			
12 noon-1:00 p.m.	Lunch			
I:00 p.m2:20 p.m.	00 p.m2:20 p.m. PLENARY SESSION III: Toxicologic Issues Chair: Mark Toraason, National Institute for Occupational Safety and He			
1:00 p.m. <b>Use of Toxicological Data in Estimating Reference Values for Risk Asses</b> Carole Kimmel, U.S. Environmental Protection Agency				
1:20 p.m.	Linking Pharmacokinetic and Biomarker Data to Mechanism of Action In Risk Assessment James Swenberg, University of North Carolina at Chapel Hill			
I:40 p.m.	Genomics, Transcriptomics, Proteomics, and Human Health Risk Assessments Kevin Morgan, GlaxoWellcome			
2:00 p.m.	Open Discussion			
2:20 p.m.	Break			
2:40 p.m4:30 p.m.	PLENARY SESSION IV: Statistical and Biologic Models of Dose and Response Chair: Dale Hattis, Clark University			
2:40 p.m. Simplicity Versus Complexity in the Design of Statistical Models for Dose-Response Assessment  Dan Krewski, University of Ottawa				
3:00 p.m. Innovative Use of Mechanistic Considerations in Forming Quantitative R Assessment Models Chris Portier, National Institute of Environmental Health Sciences				
3:20 p.m.	Toxicokinetic Models: Where We Have Been and Where We Need to Go From Here Mel Andersen, University of Colorado			
3:40 p.m4:30 p.m.	Open Discussion			

# PRELIMINARY WORKSHOP PROGRAM (continued)

#### THURSDAY, AUGUST 17TH

7:00 a.m8:00 a.m.	m8:00 a.m. Registration and Continental Breakfast					
8:00 a.m4:30 p.m.	BREAKOUT GROUP SESSIONS (CONCURRENT) Group I: Epidemiology and Risk Assessment Chair: Harvey Checkoway, University of Washington Rapporteur: Herman Gibb, U.S. Environmental Protection Agency  Group 2: Toxicology and Risk Assessment Chair: Clayton Frederick, Rohm and Haas Rapporteur: Elaine Faustman, University of Washington  Group 3: Models of Dose and Response Chair: Lauren Zeiss, State of California Rapporteur: Dale Hattis, Clark University					
8:00 a.m.	3:00 a.m. Introductory Remarks and Charge for the Group  Breakout Chairs					
8:30 a.m.	Breakout Group Identification and Discussions of Issues  Break					
10:20 a.m.	a.m. Continuation of Breakout Group Identification and Discussions of Issues					
12 noon 1:00 p.m.						
7:00 p.m.	Banquet Dinner					

# PRELIMINARY WORKSHOP PROGRAM (continued)

## FRIDAY, AUGUST 18™

7:0	00 a.m.	Registration and Continental Breakfast	
8:00 a.m12 noon		PLENARY SESSION V: Conclusions	
	8:00 a.m.	Presentation of Epidemiology Workgroup Rapporteur: Herman Gibb, U.S. Environmental Protection Agency	
	8:20 a.m.	Open Discussion	
	8:40 a.m.	Presentation of Toxicology Workgroup Rapporteur: Elaine Faustman, University of Washington	
	9:00 a.m.	Open Discussion	
	9:20 a.m.	Presentation of the Dose and Response Models Workgroup Rapporteur: Dale Hattis, Clark University	
	9:40 a.m.	Open Discussion	
10:00 a.m.		Break	
10	:20 a.m12 noon	PLENARY SESSION VI: Opportunities for Funding of Research in Risk Assessment Methodology Chair: Michael Attfield, National Institute for Occupational Safety and Health Roy Fleming, National Institute for Occupational Safety and Health Steven C. Lewis, Chemical Manufacturers Association Peter Preuss, U.S. Environmental Protection Agency Anne Sassaman, National Institute of Environmental Health Sciences	
	II:00 a.m.	Open Discussion	
П:	30 a.m12 noon	Final Synthesis and Closing Remarks Leslie Stayner, National Institute for Occupational Safety and Health	

#### REGISTRATION INFORMATION

#### **Registration Desk**

The registration desk will be open during the following hours:

Tuesday, August I5<sup>th</sup>
Wednesday, August I6<sup>th</sup>
Thursday, August I7<sup>th</sup>
Friday, August I8<sup>th</sup>
4:00 p.m. to 7:00 p.m. to 4:30 p.m. 7:00 a.m. to 4:30 p.m. 7:00 a.m. to 12 noon

#### **Hotel Accommodations**

Silvertree Hotel Wildwood Lodge P.O. Box 5009 P.O. Box 5037

Snowmass Village, CO 81615-5009 Snowmass Village, CO 81615-5037 Telephone: (970) 923-3550 Telephone: (970) 923-3550

Fax: (970) 923-5192 Fax: (970) 923-4844

A block of rooms has been reserved at the Silvertree Hotel at the rate of \$140.00 (plus tax) per night, single or double occupancy and at the Wildwood Lodge at the rate of \$99.00 (plus tax) per night, single or double occupancy. Reservations must be made directly with the hotel/lodge by **July 7, 2000**, to ensure availability. To receive the conference rate you must inform the reservation staff that you are calling for the NIOSH Conference.

The hotel/lodge requires one night deposit to guarantee your room. If the reservation is canceled more than I4 days prior to the arrival, the deposit is refunded less a \$25.00 administration fee. If canceled within the I4 day window, 100% of the deposit is forfeited unless the space is resold. If resold, the deposit shall be refunded less a \$25.00 administration fee.

Check-in time is 3:00 p.m. Check-out time is II:00 a.m.

#### **Travel Arrangements**

TRAVEL-ON, the official travel agency for the NIOSH Conference - Future Research for Improving Risk Assessment Methods, has negotiated discounted airfares for all meeting attendees with United Airlines. Make your reservations early to receive the best rates. To make reservations, call (800) 333-1225, or (301) 589-5100 between 9:00 a.m. and 4:00 p.m. (EST), fax: (301) 589-8179, or e-mail: patriciao@tvlon.com. Please refer to the NIOSH Conference.

#### **Transportation From the Airport**

Shuttle service to and from the Aspen Airport is about a 15 minute trip. At the Aspen Airport go to the Ground Transportation Board in baggage claim to call the hotel for pickup. Please note the shuttle buses will have either the Silvertree Hotel or the Wildwood Lodge in large silver letters on the side of the shuttle, so whatever shuttle arrives first, you will be able to go to either location.

# **REGISTRATION FORM**

# Future Research for Improving Risk Assessment Methods of Mice, Men, and Models

The Silvertree Hotel and Wildwood Lodge, Snowmass Village, CO

August 16-18,2000

REG	RISTRATION IS LIMITED TO 150 A	TTENDEES.					
Mr. Ms. Mrs.	Dr.						
Name	First	Mi	Degrees				
Title							
Name to appear on badge							
Address							
City	State		Zip				
Telephone	Fax						
E-mail							
Any special needs							
Wednesday night Rodeo and BB	en .						
A rodeo and BBQ is held every Wednesday and Saturday night. The cost for this event is \$31.00 per person inclusive. Each individual event cost is as follows: Rodeo \$16.00, BBQ \$15.00.							
There will be a reception style buffet dinner on Thursday evening for all invited conference participants. The reception/buffet is sponsored by the Chemical Manufacturers Association. For additional guest, the cost is \$45.00 per person.							
Tickets for both events can be purchase	ed at the Silvertree Hotel upon arriv	/al.					
Dlease check if you plan to attend	l the dinner						
<ul><li>☐ Please check if you plan to attend the dinner.</li><li>☐ Please check if bringing guest(s). How many?</li></ul>							
<b>Breakout Session Selection (Th</b>	ursday and Friday)						
Please rank your first and second choice selections for attendance at the breakout groups. Attempts will be made to honor your first choice, although assignments to these groups will be subject to space availability. Each room will hold up to 50 participants.							
<ul><li>Group I: Epidemiology and F</li><li>Group 2: Toxicology and Ris</li><li>Group 3: Models of Dose an</li></ul>	k Assessment						
Please fax your completed form to:	Estella A. Lazenby Senior Conference Manager The KEVRIC Company, Inc. 8401 Colesville Road, Suite 610	Fax:	301-588-6000 ext. 239 301-588-2106 elazenby@kevric.com				

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